Pan Li

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PROFESSIONAL EMPLOYMENT

Georgia Institute of Technology, Scheller College of Business   Atlanta, GA
Assistant Professor in Information Technology Management (tenure-track)   July 2023 - present

EDUCATION

New York University, Stern School of Business   New York, NY
Ph.D. in Information System   May 2023
Advisor: Alexander Tuzhilin

University of Science and Technology of China   Anhui, China
B.S., Mathematics & Computer Science (Special Class for the Gifted Young)   June 2017

RESEARCH INTERESTS

- Personalization, Recommender Systems and Consumer Behavior Modeling
- Artificial Intelligence, Machine Learning, Deep Learning, and NLP
- Online Controlled Experiments

INDUSTRY EXPERIENCE

Visiting Researcher, Google Brain	May 2022 - Jan 2023
Research Intern, Alibaba	Sep 2020 - July 2021
Research Intern, Baidu	Sep 2016 - Mar 2017
Research Intern, Sinovation Ventures	June 2017 - Aug 2017

JOURNAL PUBLICATIONS

[J1] **Pan Li**, Alexander Tuzhilin, "When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems", Forthcoming at *Information System Research* (**ISR**) (2023)

[J2] **Pan Li**, Maofei Que, Alexander Tuzhilin, "Dual Contrastive Learning for Efficient Static Feature Representation in Recommender System", Forthcoming at *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**) (2023)

[J3] Moshe Unger, **Pan Li**, Shahana Sen, Alexander Tuzhilin, "Reconstructing Universal Embeddings of Customers from Domain-Specific Embeddings", *ACM Transactions on Management Information Systems* (**TMIS**) Volume 14, Issue 2, Article No. 20, pp 1–30 (2023)

[J4] **Pan Li**, Alexander Tuzhilin, "Dual Metric Learning for Effective and Efficient Cross-Domain Recommendations", Forthcoming at *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**) Volume: 35 Issue: 1, pp. 321 - 334 (2023)

[J5] Pan Li, Brian Brost, Alexander Tuzhilin, "Adversarial Learning for Cross-Domain Recommendations", *ACM Transactions on Intelligent Systems and Technology* (**TIST**) Volume 14, Issue 1, Article No. 5, pp 1–25 (2022)

[J6] Pan Li, Alexander Tuzhilin, "Learning Latent Multi-Criteria Ratings from User Reviews for Recommendations" , *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), Volume: 34 Issue: 8, pp. 3854 - 3866 (2022)

[J7] Pan Li, Alexander Tuzhilin, "Latent Unexpected Recommendations", *ACM Transactions on Intelligent Systems and Technology* (**TIST**)*, 11(6), pp.1-25* (2020)

[J8] Chen Zhu, Hengshu Zhu, Hui Xiong, Chao Ma, Fang Xie, Pengliang Ding, **Pan Li**, "Person-Job Fit: Adapting the Right Talent for the Right Job with Joint Representation Learning", *ACM Transactions on Management Information Systems* (**TMIS**) *9, no.3:1-17* (2018)

WORKING PAPERS

[W1] Pan Li, Alexander Tuzhilin, "A Dynamic System Framework for Modeling Consumer Trajectories and Exploring Consumer Preferences in Recommender System", Under Review at *Information System Research* (**ISR**)

[W2] Pan Li, Alexander Tuzhilin, "Killing Two Birds with One Stone: Deep Reinforcement Learning for Optimizing Multiple Objectives in Recommender System", Under Review at *Information System Research* (**ISR**)

[We] Pan Li, Alexander Tuzhilin, "Exploring and Exploiting Consumer Preferences through Deep Reinforcement Learning and Latent Trajectory Modeling in Recommender Systems", Under Revision for Resubmission at *Marketing Science* (**MKSC**)

[W4] Moshe Unger, **Pan Li**, Maxime Cohen, Brian Brost, Alexander Tuzhilin, "Deep Multi-Objective Multi-Stakeholder Music Recommendation", Under Revision for Resubmission at *Information System Research* (**ISR**)

[W5] Pan Li, Alexander Tuzhilin, "I want to know more!": Measuring the Impact of Triggering Consumer Curiosity in Recommender System", Under Revision for Resubmission at *Information System Research Management Science* (**MS**)

[W6] Pan Li, Yuyan Wang, Ed Chi, Minmin Chen. "Modeling hierarchical User Exploration for Improving Long-Term Performance in Recommender Systems.", Manuscript Completed. To be Submitted to *Marketing Science* (**MKSC**)

[W7] Pan Li, Yuyan Wang, Ed Chi, Minmin Chen. "Prompt Tuning Large Language Models on Personalized Aspect Extraction for Recommendations." , Manuscript Completed. To be Submitted to *Marketing Science* (**MKSC**)

[W8] Pan Li, Jie Xu, Min Ding, DJ Wu, "An Approach to Uncover Theoretical Insights Using Visual Analytics", In Preparation for Submission to *Information System Research* (**ISR**)

TOP-TIER CONFERENCE PUBLICATIONS

[C1] Pan Li, Zhichao Jiang, Maofei Que, Yao Hu, Alexander Tuzhilin, "Dual Attentive Sequential Learning for Cross Domain Click-Through Rate Prediction", *Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining* (**KDD 2021**)
Full Paper with Oral Presentation; Acceptance Rate: 15.4%

[C2] Pan Li, Maofei Que, Zhichao Jiang, Yao Hu, Alexander Tuzhilin, "PURS: Personalized Unexpected Recommender System for Improving User Satisfaction", *Proceedings of the 14th ACM Conference on Recommender System* (**RecSys 2020**)
Full Paper with Oral Presentation; Acceptance Rate: 18%

[C3] Pan Li, Alexander Tuzhilin, "DDTCDR: Deep Dual Transfer Cross Domain Recommendation", *Proceedings of the 13th International Conference on Web Search and Data Mining* (**WSDM 2020**)
Full Paper with Oral Presentation; Acceptance Rate: 15%

[C4] Pan Li, Alexander Tuzhilin, "Towards Controllable and Personalized Review Generation", *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing* (**EMNLP 2019**)
Full Paper with Poster Presentation; Acceptance Rate: 24.6%

[C5] Pan Li, Alexander Tuzhilin, "Latent Multi-Criteria Ratings for Recommendations", *Proceedings of the 13th ACM Conference on Recommender Systems* (**RecSys 2019**)
Short Paper with Poster Presentation; Acceptance Rate: 19%

[C6] Pan Li, Alexander Tuzhilin, "Latent Modeling of Unexpectedness for Recommendations", *Proceedings of the 13th ACM Conference on Recommender Systems* (**RecSys 2019**)
Late-Breaking Result Track Paper with Poster Presentation; Acceptance Rate: 31%

[C7] Tong Xu, Hengshu Zhu, Chen Zhu, **Pan Li**, Hui Xiong, "Measuring the popularity of job skills in recruitment market: A multi-criteria approach", *Proceedings of Thirty-Second AAAI Conference on Artificial Intelligence* (**AAAI 2018**)
Full Paper with Poster Presentation; Acceptance Rate: 24.6%

TEACHIING EXPERIENCE

New York University   New York, NY
Instructor for "Data Science for Business"   Summer 2022
- Teaching Evaluation: **5.0/5.0** (instructor) **4.7/5.0** (course)
- In-person teaching based on lectures, hands-on sessions and case studies
- 15 undergraduate students enrolled

New York University   New York, NY
Teaching Fellow for "Introduction to AI & Its Applications in Business"   Spring 2020, 2021

- Co-design the class materials, homework assignments and final project with the instructor
- Lead of the lab session for 60 students (MSBA and MBA-level)

INVITED TALKS

[1] "Consumer Preference Exploration with Unexpected Recommender System" (**Job Talk**)

University of Hong Kong, Hong Kong University of Science and Technology, National University of Singapore, Georgia Institute of Technology, University of Washington, University of British Columbia, University of Wisconsin - Madison, University of Texas – Dallas, Southern Methodist University (*October – December 2022*)

[2] "Killing Two Birds with One Stone: Deep Reinforcement Learning for Optimizing Multiple Objectives in Recommender System", *Conference on Information Systems and Technology, Indianapolis, October 2022* (**CIST 2022**)

[3] "Dual Contrastive Learning for Efficient Static Feature Representation in Recommender System", *Conference on Information Systems and Technology, Indianapolis, October 2022* (**CIST 2022**)

[4] "Consumer Preference Exploration in Recommender System", *IS Student Presentations Over the Cloud (***ISPOC***), Virtual, August 2022*

[5] "Recent Progress on Consumer Exploration", *Invited Talk at Google Brian, August 2022*

[6] "I want to know more!": Measuring the Impact of Triggering Consumer Curiosity in Recommender System", *ISMS Marketing Science Conference, Virtual, June 2022* (**ISMS 2022**)

[7] "Reconstructing Universal Embeddings of Customers from Domain-Specific Embeddings", *ISMS Marketing Science Conference, Virtual, June 2022* (**ISMS 2022**)

[8] "Dual Learning for Cross-Domain Recommendations", *Invited Talk at TikTok, April 2022*

[9] "Personalized Unexpected Recommender System", *University of Texas – Austin, February 2022*

[10] "Exploring and Exploiting Consumer Preferences through Deep Reinforcement Learning and Latent Trajectory Modeling in Recommender Systems", *The 31st Workshop on Information Technology and Systems, Austin, December 2021* (**WITS 2021 Doctoral Consortium**)

[11] "Multi-Faceted Consumer Preferences: Incorporating Unexpectedness and Cross-Domain Information into Design of Recommender System", *The 31st Workshop on Information Technology and Systems, Austin, December 2021* (**WITS 2021**)

[12] "Unexpectedness in Recommender Systems", *Invited Talk at Alibaba, September 2021*

[13] "Leveraging Multi-Faceted User Preferences for Improving Click-Through Rate Predictions" *ACM Conference on Recommender Systems, Virtual, September 2021* (**RecSys 2021 Doctoral Consortium**)

[14] "When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems", *Conference on Information Systems and Technology, Anaheim, October 2021* (**CIST 2021**)

[15] "Incorporating Dual Metric with Sequential Learning for Cross-Domain Recommendations", *Conference on Information Systems and Technology, Anaheim, October 2021* (**CIST 2021**)

[16] "When Variety-Seeking Meets Unexpectedness: Incorporating Variety-Seeking Behavior into Design of Unexpected Recommender Systems", *ISMS Marketing Science Conference, Virtual, June 2021* (**ISMS 2021**)

[17] "Adversarial Learning for Cross-Domain Recommendations", *The 30th Workshop on Information Technology and Systems, Virtual, December 2020* (**WITS 2020**)

[18] "Will Unexpectedness Help Recommendations and When: Evidence from A Large-Scale Online Controlled Experiment", *Conference on Information Systems and Technology, Virtual, October 2020* (**CIST 2020**)

[19] "Dual Learning for Cross-Domain Recommendations: Improving Efficiency and Effectiveness of Recommender Systems" , *Conference on Information Systems and Technology, Virtual, October 2020* (**CIST 2020**)

[20] "Hybrid Utility Function for Unexpected Recommendations", *International Conference on Web Search and Data Mining, Houston, February 2020* (**WSDM 2020 Doctoral Consortium**)

AWARDS

NYU Fubon Doctoral Fellowship	2022-2023
INFORMS Marketing Science Doctoral Consortium	2022
WITS Conference Best Dissertation Award	2021
WITS Conference Best Student Paper Runner-Up Award	2021
ACM RecSys Doctoral Consortium	2021
SIGIR Travel Award	2020
WSDM Doctoral Consortium	2022
NYU Stern PhD Fellowship	2017-2022

ACADEMIC SERVICE

Program Committee: KDD, INFORMS DS Workshop, RecSys, EMNLP, ACL, CIST, WITS

Invited Reviewer: Management Science, ISR, MISQ, IEEE TKDE, ACM TIST, ACM TMIS, IEEE Intelligent System, ACL, EMNLP, AAAI, IJCAI, ICIS, CIST, WITS